ABC COKE
A DIVISION OF
DRUMMOND COMPANY, INC.

SUMMARY REPORT

On October 17, 2018, David Vance, a senior chemist from ABC Coke's onsite laboratory, collected tar crumb samples from the metal chutes of the east and west tar decanters using USEPA's Tar Crumb Water Percentage Determination Protocol (Attachment 1). Six (6) crumb samples were collected (three from each decanter) and analyzed using a modified version of ASTM D 1461-7 *Standard Method for Moisture of Volatile Distillates in Asphalt Mixture* to determine water content of the tar crumb exiting the decanter but before falling into the tar buggies. To obtain a representative sample, fresh crumb was taken from various locations across each chute (corners, sides, etc.) and composited. While the samples were collected, the operating conditions at the by-products plant were normal and the weather conditions were cloudy/overcast with no wind or precipitation. The samples were collected in stainless steel sample containers, which were sealed and labeled with unique sample IDs and the date/time of collection.

Following strict chain-of-custody protocols, the samples were relinquished by ABC Coke personnel, picked up and taken to Laboratory Research and Solutions, Inc. (LRS) via their courier. Upon arrival at LRS, the samples were packed and shipped overnight to Asphalt Pavement & Recycling Technologies, Inc. (APART), a specialty lab in California certified to run the ASTM D-1461-7 method. The Analytical Data Report from LRS and APART is included as Attachment 2.

The analytical results from the six samples found the moisture content in the tar crumb to be between 6.1 - 9.0%, with an average of 7.65%.

Sample ID	Moisture Content (%)
East Tar Decanter 1	7.3
East Tar Decanter 2	8.3
East Tar Decanter 3	7.8
West Tar Decanter 1	6.1
West Tar Decanter 2	7.4
West Tar Decanter 3	9.0
Average	**7.65%**

ATTACHMENT 1
USEPA Tar Crumb Water Percentage Determination

ATTACHMENT 2

ANALYTICAL DATA REPORT